NHS Connecting for Health	**<Insert protective marking if applicable>** **CSV Upload Schema**			
	Programme	NPFIT	**Document Record ID Key**	
	Sub-Prog / Project	Systems & Service Delivery	<Insert Document Record ID Key> DN: document ID to be linked to ISB number and references once approved.	
	Prog. Director		Status	Draft
	Owner	DH	Version	1.5.3
	Author	Tim Hancox	Version Date	29 December 2011

National Cancer Waiting Times Monitoring Dataset CSV Upload Schema (Version 1.5.3)

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Amendment History:

Version	Date	Amendment History	Amended By
1.0	03/02/2009	Initial Release	
1.3	30/03/2009	Update following clarification of CaB organisation code and relating to CWT Output Specification v1.4	
1.3.1	01/04/2009	Suspends two validation rules on advice of DH pending full 62-day functionality test.	
1.4	04/08/2009	Introduces a minimal change to validation (not expected to impact on local systems) that will stop the creation of duplicate records on the CWT-Db.	
1.4.1	25/11/2009	Adds an additional cross field validation rule to prevent future instances of a data error that currently exists in 0.098% of records.	
1.5	03/02/2010	Removes redundant validation and enters new validation rules to reduce the potential for duplicate two week wait records. Also introduces validation to address outstanding issues.	
1.5.1	23/02/2010	Add additional validation to improve instances of organisation code and stop over burden on data quality module. (development and test version)	
1.5.1a	17/03/2010	Add additional validation to improve instances of organisation code and stop over burden on data quality module.	
1.5.1b (1.5.2)	14/03/2011	Add additional validation for rare cancers to force a breach reason for rare tumours that take longer than 31 days from referral to treatment.	Horace Denny
1.5.3	04/10/2011	Updated to support changes to dataset for choice and modality	Tim Hancox

Forecast Changes:

Anticipated Change	When

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Distribution:

Joan Foreman – NHS Connecting for Health

Tim Hancox – Department of Health

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Related Documents:

These documents will provide additional information.

Ref no	Doc Reference Number	Title	Version
		Cancer Waiting Times User Manual	6.0

Glossary of Terms:

List any new terms created in this document. Mail the NPO Quality Manager to have these included in the master glossary above [1].

Term	Acronym	Definition

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1 About this Document

1.1 Introduction

This document is to provide the CSV Upload requirements for the next development of the Cancer Waits system (CWT) which is to support the continued monitoring of the national requirements for cancer waiting times within the NHS.

This document will form part of the CWT User Manual and to all intents is complete and correct but subject to possible change (although where this occurs it will be kept to the absolute minimum necessary and/or restricted to changes in format) with final verification upon release of the GFOCW amendments to the CWT.

2 Format of the Upload File

Records to be uploaded must be saved in a comma separated (CSV) text file. This holds each record on a separate line of the file, with fields within each record being separated by commas. To prevent errors when a comma appears within the actual data of a field (e.g. in a notes field), all data values should be quotes wrapped (i.e. surrounded by double quotation marks) – this includes empty fields, which will appear in the CSV file as two quote characters together (e.g. ""). The CSV file should only contain data, and not the associated field names.

Each record must comprise 40 fields, as described in the table below. All dates must be formatted as CCYY-MM-DD. See DSCN 20/2008 or the NHS Data Dictionary at: http://www.datadictionary.nhs.uk/index.asp for more information about the format and permitted code options for individual data fields. Care must be taken to ensure that codes that contain leading zeros are entered correctly, e.g. code '03' must appear in the CSV file as '08' and not as '8'.

The name of the CSV file does not make any difference to the way it is processed, so you can give it any valid file name. The same name can be used for more than one upload file, although you may prefer to give each file a unique name, to locate it more easily should you need to re-submit the file. Please do not include patient or clinician names in the file name, as this would violate their right to confidentiality.

The layout for each record is:

Field No.	Field Name	Data Type
1	NHS Number	N10
2	Patient Pathway Identifier (PPI)	AN20
3	Organisation Code (PPI Identifier)	AN5
4	Source Of Referral For Out-Patients	AN2
5	Priority Type Code	AN1
6	Decision To Refer Date (Cancer and Breast Symptoms)	CCYY-MM-DD
7	Cancer Referral To Treatment Period Start Date	CCYY-MM-DD
8	Urgent Cancer or Symptomatic Breast Referral Type	AN2
9	Consultant Upgrade Date	CCYY-MM-DD
10	Site Code (of Provider Consultant upgrade)	AN5

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Field No.	Field Name	Data Type
11	Date First Seen	CCYY-MM-DD
12	Site Code (of Provider First Seen)	AN5
13	Waiting Time Adjustment (First Seen)	N3
14	Waiting Time Adjustment Reason (First Seen)	AN1
15	Delay Reason Comment (First Seen)	Free text (255 characters Max)
16	Delay Reason Referral To First Seen (Cancer and Breast Symptons)	AN2
17	MDT Discussion Indicator	AN1
18	Multidisciplinary Team Discussion Date	CCYY-MM-DD
19	Cancer or Symptomatic Breast Referral Status	AN2
20	Primary Diagnosis (ICD)	AN5
21	Metastatic Site	AN2
22	Tumour Laterality	AN1
23	Cancer Treatment Event Type	AN2
24	Site Code (of Provider Decision To Treat, Cancer)	AN5
25	Cancer Treatment Period Start Date	CCYY-MM-DD
26	Treatment Start Date (Cancer)	CCYY-MM-DD
27	Cancer Treatment Modality	AN2
28	Clinical Trial Indicator	AN2
29	Cancer Care Setting (Treatment)	AN2
30	Site Code (of Treatment Start Date, Cancer)	AN5
31	Radiotherapy Treatment Intent	AN2
32	Radiotherapy Priority	AN1
33	Delay Reason Comment (Decision To Treatment)	Free text (255 characters Max)
34	Delay Reason Decision To Treatment	AN2
35	Waiting Time Adjustment (Treatment)	N3
36	Waiting Time Adjustment Reason (Treatment)	AN1
37	Delay Reason Comment (Referral To Treatment)	Free text (255 characters Max)
38	Delay Reason Referral To Treatment	AN2
39	Delay Reason Comment (Consultant Upgrade)	Free text (255 characters Max)
40	Delay Reason (Consultant Upgrade)	AN2

3 Validation and Processing Rules

When you post your upload onto the queue, an initial validation check is carried out on the records in the CSV file. Single field validation checks designed to ensure that codes included in fields are valid (e.g. NHS Number must be a valid 10 digit NHS number).are carried out at this point in the process.

Note that your file will not be accepted onto the upload queue unless all of the records in the file pass this initial validation. If any errors are displayed, you must correct the records at source, and re-create and re-upload the CSV file.

Actual error message text is shown in italics

3.1 Additional Single Field Validation Checks

Three single field validation checks, designed to catch Excel 'error' markers, are only carried out during the initial upload validation (but not in the Record screen).

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The following fields must not consist only of a series of # characters:

- Delay Reason Comment (First Seen)
- Delay Reason Comment (Decision To Treatment)
- Delay Reason Comment (Referral To Treatment)

3.2 Advanced and Cross-Field Validation Checks Performed When Upload Is Posted

When the records are first posted into the upload queue the following checks are run:

1. NHS NUMBER must be in the correct format, and all instances must be valid numbers that exist within PDS (the Personal Demographics Service), which is the master patient index for this system.

2. All instances of SITE CODE or ORGANISATION CODE within the submitted data must relate to valid registered organisations (at the time of upload) within the ODS organisation lists. (including central organisation codes for national systems and private providers where applicable)

   Please note: **Where a patient has been referred to secondary care via Chose and Book (CaB) the ORGANISATION CODE (PATIENT PATHWAY IDENTIFIER ISSUER) will always be the 3-digit code X09.** This is because CaB does not have its own 5-digit site code, using instead the 3-digit organisation code of CfH. All other instances of this data item should be 5-digits.

Following the application of these validation rules the cross field validations will run. These validation processes are split into two phases, one of which will run before a record is matched to an existing record on the CWT system (if applicable) and one which will run after an match is identified. The specific cross field validation checks are:

RULE NUMBER	RULE	PHASE
3	VALIDATION RULE RETIRED (2009)	
4	If PRIORITY TYPE CODE is ‘3’ (Two Week Wait) then CANCER REFERRAL TO TREATMENT PERIOD START DATE must not be blank.	XF-Phase 1
5	If PRIORITY TYPE CODE IS ‘3’ and DATE FIRST SEEN is present SITE CODE (OF PROVIDER FIRST SEEN) must not be blank.	XF-Phase 1

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RULE NUMBER	RULE	PHASE
6	If PRIORITY TYPE CODE is ‘1’ CANCER TREATMENT PERIOD START DATE must not be blank.	XF-Phase 2
7	CANCER REFERRAL TO TREATMENT PERIOD START DATE cannot be after CANCER TREATMENT PERIOD START DATE	XF-Phase 2
8	If present, DECISION TO REFER (CANCER AND BREAST SYMPTOMS) cannot be after CANCER REFERRAL TO TREATMENT PERIOD START DATE.	XF-Phase 1
9	DATE FIRST SEEN cannot be before CANCER REFERRAL TO TREATMENT PERIOD START DATE.	XF-Phase 1
10	If the patient is aged less than 16 years at CANCER REFERRAL TO TREATMENT PERIOD START DATE , and PRIORITY TYPE CODE is ‘3’ URGENT CANCER OR SYMPTOMATIC BREAST REFERRAL TYPE must be code ‘02’ (Suspected Children’s Cancer) or ‘16’ (Exhibited (non-cancer) breast symptoms)	XF-Phase 1
11	If WAITING TIME ADJUSTMENT (FIRST SEEN) is a value greater than 0 (zero) then both CANCER REFERRAL TO TREATMENT PERIOD START DATE and DATE FIRST SEEN must not be blank.	XF-Phase 2
12	If WAITING TIME ADJUSTMENT (FIRST SEEN) is a value greater than 0 (zero) then WAITING TIME ADJUSTMENT REASON (FIRST SEEN) must be ‘3’ (DNA).	XF-Phase 2
13	CANCER REFERRAL TO TREATMENT PERIOD START DATE cannot be after CONSULTANT UPGRADE DATE.	XF-Phase 1
14	If PRIORITY TYPE CODE is ‘3’ (Two Week Wait) then CONSULTANT UPGRADE DATE must be blank.	XF-Phase 1
15	If SOURCE OF REFERRAL FOR OUTPATIENTS is equal to ‘17’ (Referral from a National Screening Programme) and PRIORITY TYPE CODE is equal to ’2 (urgent)’ or ‘3’ (two week wait) then CONSULTANT UPGRADE DATE must be left blank.	XF-Phase 2

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RULE NUMBER	RULE	PHASE
16	If MULTIDISCIPLINARY TEAM DISCUSSION DATE and CONSULTANT UPGRADE DATE are both present, CONSULTANT UPGRADE DATE cannot be after MULTIDISCIPLINARY TEAM DISCUSSION DATE.	XF-Phase 1
17	If present, CONSULTANT UPGRADE DATE cannot be after CANCER TREATMENT PERIOD START DATE.	XF-Phase 1
18	If CONSULTANT UPGRADE DATE is present SITE CODE (OF PROVIDER CONSULTANT UPGRADE) must not be blank.	XF-Phase 1
19	If PRIORITY TYPE CODE is '3' (Two Week Wait) and the calculated period between CANCER REFERRAL TO TREATMENT PERIOD START DATE and DATE FIRST SEEN is greater than 14 days (after adjustments have been taken into account) DELAY REASON REFERRAL TO FIRST SEEN (CANCER AND BREAST SYMPTOMS) must not be blank.	XF-Phase 1
20	If DELAY REASON REFERRAL TO FIRST SEEN (CANCER AND BREAST SYMPTOMS) is not blank then DELAY REASON COMMENT (FIRST SEEN) must not be blank.	XF-Phase 1
21	VALIDATION RULE RETIRED (2009)	
22	If CANCER TREATMENT PERIOD START DATE is present TREATMENT START DATE (CANCER) can be blank, however if TREATMENT START DATE (CANCER) is present CANCER TREATMENT PERIOD START DATE must not be blank.	XF-Phase 1
23	If PRIMARY DIAGNOSIS is present TUMOUR LATERALITY cannot be blank.	XF-Phase 1
24	If TREATMENT START DATE (CANCER) is not blank CANCER TREATMENT MODALITY cannot be blank.	XF-Phase 1
25	If TREATMENT START DATE (CANCER) is not blank CANCER TREATMENT EVENT TYPE cannot be blank.	XF-Phase 1
26	If TREATMENT START DATE (CANCER) is not blank CLINICAL TRIAL INDICATOR cannot be blank.	XF-Phase 1
27	If TREATMENT START DATE (CANCER) is not blank CANCER CARE SETTING (TREATMENT) cannot be	XF-Phase 1

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RULE NUMBER	RULE	PHASE
	blank.	
28	If CANCER TREATMENT MODALITY is code ‘05’ (Teletherapy) RADIOTHERAPY TREATMENT INTENT must not be blank.	XF-Phase 1
29	If CANCER TREATMENT MODALITY is code ‘05’ (Teletherapy) RADIOTHERAPY PRIORITY must not be blank.	XF-Phase 1
30	If CANCER TREATMENT EVENT TYPE is code ‘01’, ‘02’ or ‘03’ METASTATIC SITE must be blank.	XF-Phase 1
31	If METASTATIC SITE is not blank PRIMARY DIAGNOSIS must not be blank.	XF-Phase 1
32	If CANCER TREATMENT EVENT TYPE is code ‘05’, ‘07’ or ‘08’ METASTATIC SITE must not be blank.	XF-Phase 1
33	If WAITING TIME ADJUSTMENT (TREATMENT) is not blank CANCER CARE SETTING (TREATMENT) cannot be blank	XF-Phase 1
34	If CANCER CARE SETTING (TREATMENT) is code ‘03’, ‘04’ or ‘99’ WAITING TIME ADJUSTMENT (TREATMENT) must be blank.	XF-Phase 1
35	If WAITING TIME ADJUSTMENT TREATMENT is not blank CANCER TREATMENT PERIOD START DATE and TREATMENT START DATE (CANCER) must not be blank.	XF-Phase 1
36	If WAITING TIME ADJUSTMENT (TREATMENT) is not blank WAITING TIME ADJUSTMENT REASON (TREATMENT) must not be blank.	XF-Phase 1
37	If PRIORITY TYPE CODE is ‘3’ (Two Week Wait) and the calculated period between CANCER REFERRAL TO TREATMENT PERIOD START DATE and TREATMENT START DATE (CANCER) is greater than 62 days ((after any adjustment to the calculated waiting time) DELAY REASON (REFERRAL TO TREATMENT) must not be blank.	XF-Phase 2
38	If PRIORITY TYPE CODE is not ‘3’ (Two Week Wait) and SOURCE OF REFERRAL FOR OUTPATIENTS is code ‘17’ (National Screening Programme) and the calculated period between CANCER REFERRAL TO TREATMENT PERIOD START DATE and TREATMENT START DATE (CANCER) is greater than 62 days (after any adjustment to the calculated waiting time) DELAY REASON (REFERRAL TO	XF-Phase 2

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RULE NUMBER	RULE	PHASE
	TREATMENT) must not be blank.	
39	If DELAY REASON (REFERRAL TO TREATMENT) is not blank DELAY REASON COMMENT (REFERRAL TO TREATMENT) cannot be blank.	XF-Phase 2
40	If CONSULTANT UPGRADE DATE is present, and TREATMENT START DATE (CANCER) is present and the calculated period between CONSULTANT UPGRADE DATE and TREATMENT START DATE(CANCER) is greater than 62 days (after any adjustment to the calculated waiting time) DELAY REASON (CONSAULTANT UPGRADE) must not be blank.	XF-Phase 2
41	If DELAY REASON (CONSULTANT UPGRADE) is not blank DELAY REASON COMMENT (CONSULTANT UPGRADE) cannot be blank.	XF-Phase 2
42	If the calculated period between CANCER TREATMENT PERIOD START DATE and TREATMENT START DATE (CANCER) is greater than 31 days (after any adjustment to the calculated waiting time) DELAY REASON (DECISION TO TREATMENT) must not be blank.	XF-Phase 1
43	If DELAY REASON (DECISION TO TREATMENT) is not blank DELAY REASON COMMENT (DECISION TO TREATMENT) must not be blank.	XF-Phase 1
44	If CANCER TREATMENT EVENT TYPE is not blank TREATMENT START DATE (CANCER) cannot be blank.	XF-Phase 1
45	If CANCER TREATMENT MODALITY is not blank CANCER TREATMENT EVENT TYPE cannot be blank	XF-Phase 1
46	If CANCER TREATMENT PERIOD START DATE and TREATMENT START DATE (CANCER) are not blank, TREATMENT START DATE (CANCER) must be on or after CANCER TREATMENT PERIOD START DATE.	XF-Phase 1
47	If CANCER TREATMENT EVENT TYPE is not blank, and is not code ‘01’ or ‘07’ PRIORITY TYPE CODE must be blank	XF-Phase 1
48	If CANCER TREATMENT EVENT TYPE is not blank, and is not code ‘01’ or ‘07’ DATE FIRST SEEN must be blank	XF-Phase 1

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RULE NUMBER	RULE	PHASE
49	If WAITING TIME ADJUSTMENT REASON (TREATMENT) is code '9' WAITING TIME ADJUSTMENT (TREATMENT) must be a value of zero (0)	XF-Phase 1
50	If CANCER TREATMENT PERIOD START DATE is not blank SITE CODE (OF PROVIDER DECISION TO TREAT, CANCER) cannot be blank	XF-Phase 1
51	If TREATMENT START DATE (CANCER) is not blank SITE CODE (OF TREATMENT START DATE, CANCER) cannot be blank	XF-Phase 1
52	If PRIORITY TYPE CODE is '3' (Two Week Wait) and the record is identified as a Rare Cancer (i.e. the patient is aged 16 years or under at CANCER REFERRAL TO TREATMENT PERIOD START DATE or the PRIMARY DIAGNOSIS belongs to a Rare Cancer Reporting Category) and the calculated period between CANCER REFERRAL TO TREATMENT PERIOD START DATE and TREATMENT START DATE (CANCER) is greater than 31 days ((after any adjustment to the calculated waiting time) DELAY REASON (REFERRAL TO TREATMENT) must not be blank.	XF-Phase 2

Phase one (XF-Phase 1) validations are repeated at phase two (XF-Phase 2) to ensure that the matching of a record has not introduced a change to saved data items that would cause an accepted record to subsequently fail validation.

Please Note: Validation rules 44 to 48 have been introduced within the Phase iii development programme to reduce the circumstances where an omission of data could accidentally create a duplicate. Duplicates are still possible after this change, but are indistinguishable from genuine records where multiple treatments are delivered on the same day as part of a package of care.

3.3 Record Matching

During the upload process the CWT will attempt to match records wihin the CSV upload to those which are already saved in the main data table for the purposes of updates to records, or to append two week wait data to treatment data to create a 62-day record. The logic behind this process is as follows:

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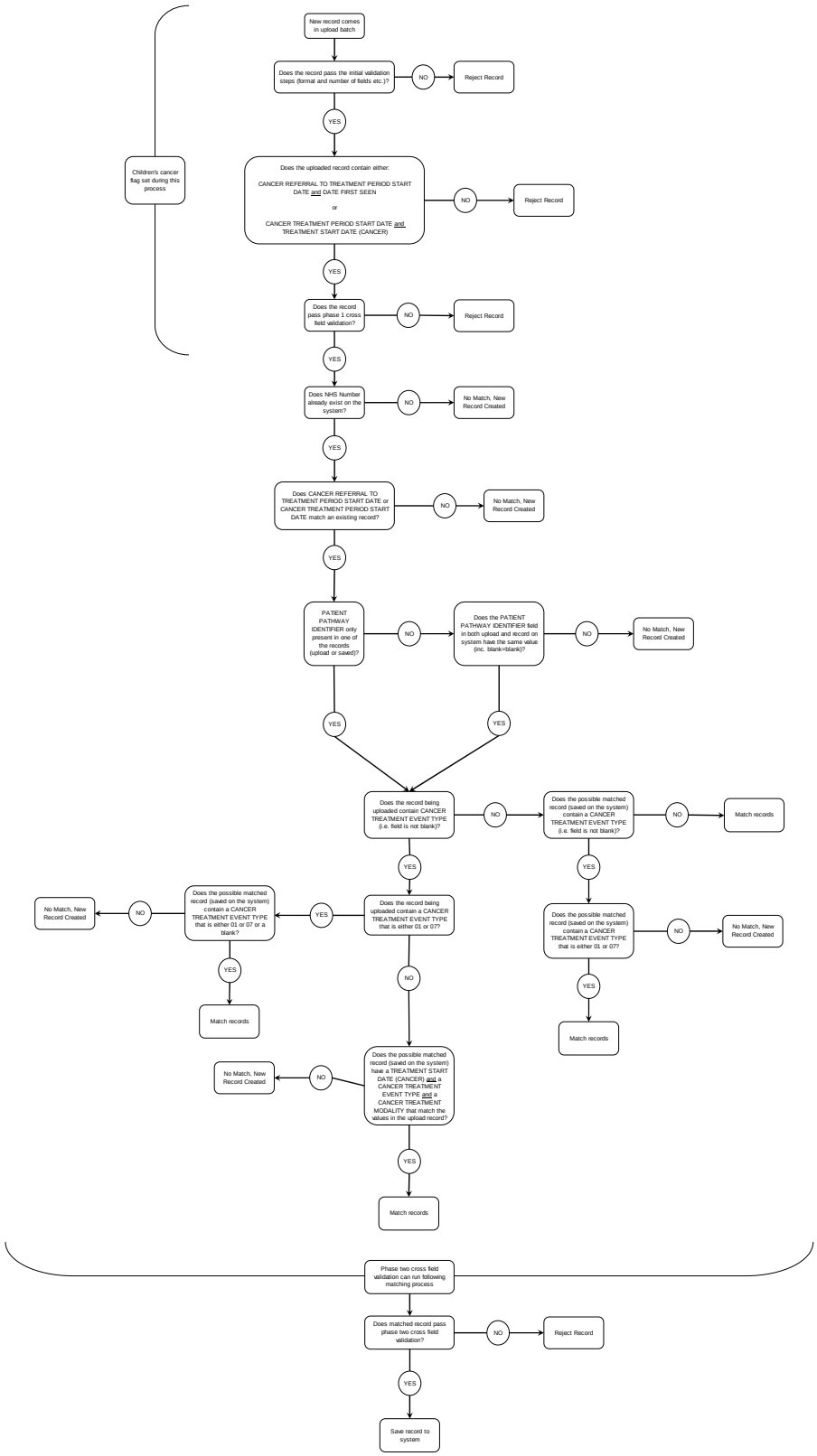
New record comes in upload batch
Does the record pass the initial validation steps (format and number of fields etc.)?
NO
Reject Record
YES
Children's cancer flag set during this process
Does the uploaded record contain either:
CANCER REFERRAL TO TREATMENT PERIOD START DATE and DATE FIRST SEEN
or
CANCER TREATMENT PERIOD START DATE and TREATMENT START DATE (CANCER)
NO
Reject Record
YES
Does the record pass phase 1 cross field validation?
NO
Reject Record
YES
Does NHS Number already exist on the system?
NO
No Match, New Record Created
YES
Does CANCER REFERRAL TO TREATMENT PERIOD START DATE or CANCER TREATMENT PERIOD START DATE match an existing record?
NO
No Match, New Record Created
YES
PATIENT PATHWAY IDENTIFIER only present in one of the records (upload or saved)?
NO
Does the PATIENT PATHWAY IDENTIFIER field in both upload and record on system have the same value (inc. blank=blank)?
NO
No Match, New Record Created
YES
YES
Does the record being uploaded contain CANCER TREATMENT EVENT TYPE (i.e. field is not blank)?
NO
Does the possible matched record (saved on the system) contain a CANCER TREATMENT EVENT TYPE (i.e. field is not blank)?
NO
Match records
YES
YES
Does the record being uploaded contain a CANCER TREATMENT EVENT TYPE that is either 01 or 07?
YES
Does the possible matched record (saved on the system) contain a CANCER TREATMENT EVENT TYPE that is either 01 or 07 or a blank?
NO
No Match, New Record Created
YES
Match records
NO
Does the possible matched record (saved on the system) have a TREATMENT START DATE (CANCER) and a CANCER TREATMENT EVENT TYPE and a CANCER TREATMENT MODALITY that match the values in the upload record?
NO
No Match, New Record Created
YES
Match records
Does the possible matched record (saved on the system) contain a CANCER TREATMENT EVENT TYPE that is either 01 or 07?
NO
No Match, New Record Created
YES
Match records
Phase two cross field validation can run following matching process
Does matched record pass phase two cross field validation?
NO
Reject Record
YES
Save record to system

If a single possible matched record has not been identified following the matching processes demonstrated in this diagram, an error message to this effect will be returned to the user and the record will not be saved on the system.

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